Enterprise Information Management and Information Strategy: A Brief How-To Guide

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The road to information governance (IG) varies greatly between healthcare organizations. Some organizations may compare it to a pathway with trampled grass, partially filled with gravel, while others find a freshly paved highway with a few cracks and potholes.

In our current Information Age, information has become increasingly valuable. Companies such as Google and Facebook rely on business models that monetize information as an asset. The user information these companies generate can be directly monetized because of its potential to reach consumers and identify trends. Industry analysts have noted this information to be worth billions of dollars.

As described in the book *Infonomics*, information may also be monetized indirectly. Indirect methods include using data to reduce costs, improve productivity, reduce risks, develop new products or markets, and build or solidify business relationships.[1] These indirect information valuation methods can be employed by the healthcare industry to begin characterizing information as an organizational asset. The enterprise information management (EIM) model, a term largely used in the information technology (IT) industry, has emerged in an effort to protect the organization's information as an investment.

How EIM Shapes IG and the Information Strategy

IG is a concept that's been taking shape over the last decade. EIM is a part of IG. AHIMA defines IG as an organization-wide framework for managing information throughout its lifecycle and supporting the organization's strategy, operations, regulatory, legal, risk, and environmental requirements. IG establishes policy, prioritizes investments, values and protects information assets, and determines accountabilities for managing information, making it an imperative for healthcare.[2] As a recognized leader in the multi-industry information technology sector, Gartner has developed the following definition for EIM. EIM is an integrative discipline for structuring, describing, and governing information assets across organizational and technological boundaries to improve efficiency, promote transparency, and enable business insight.[3]

Every organization manages the following EIM components to some extent to maintain compliance, further business objectives, and enhance customer services:

- **Information Architecture:** Servers, integrations, networks, and hardware are typically the first things that come to mind when one thinks of the term information architecture. However, this architecture also encompasses the hierarchies of information context from sections on forms, screens, and viewing order. Health information tells a story and its representation framework must be carefully developed to accurately reflect that story. Health information and informatics professionals (HIPs) have been publishers of this story for decades and are positioned to be experts to determine what works (or sells).
- **Data Warehouse and Business Intelligence:** This concept is usually the focus of data science teams, which specialize in developing data models, algorithms, calculations, and advanced processing. They also develop intelligence reports and visualizations of the data analysis.
- **Meta, Master, and Reference Data Management:** In many cases, legal jurisdictions rely on organizations to produce definitions of what it considers to be formal records and recordkeeping procedures. HIPs are trained to define and document information policies, master formats, and data definitions.
- **Information Security Management:** This encompasses cybersecurity, encryption, firewalls, logins, passwords, etc. There is a large footprint in the industry today focused on security to prevent breaches and address ransomware. This focus is typically very technical and dominated by those who specialize in hardware, software, and networking intricacies.

- **Information Quality Management:** In many cases, this refers to proper mapping, formatting, lengths of fields, sources of truth, and database cataloging. These types of mechanics and rules are quantitative requirements for maintaining information quality. HIPs have skillsets that expand on these requirements by bringing the qualitative fundamentals of information veracity to the table.
- **Data Governance:** Usually refers to data ownership, consolidation, packaging, and aligning tactics with a larger data modeling strategy. Data governance is a competency of IG. It focuses on standardization and sensible allowances to maintain data lineage.

The organization's information strategy acts as the hub for all of the EIM components. What can the information do to bring value to the organization and support its long-term goals? What are the regulatory pressures—such as the 21st Century Cures Act or the Trusted Exchange Framework—being applied to the management of information that will shape the organization's approach? How does the IG landscape compare or fit in? Maybe it connects the dots or links each of the components, or maybe it lives in one or two of the areas and interacts with the others. Or perhaps it is an entry point or an exit point, or maybe it is the ongoing process improvement program for EIM.

Take inventory of the current EIM structure to understand the strengths and weaknesses in order to build IG around where the organization is going.

Honing the Information Strategy with IG

Cultivating information asset valuation in partnership with the EIM framework is an optimal first step. The second step is aligning IG efforts with the information strategy and then governing the focus through prioritization and solid business case realization. Determine information strategies and continue to brand them.

There are many factors to assess. Some can be considered long-term, while others are short-term. Deciding which one to pursue takes reconciliation with the organization's other business-driven strategies. It may be that the healthcare organization is looking to increase services within the community through outpatient locations. Perhaps the organization is looking to standardize and consolidate healthcare services provided by the pharmacy to all of its campuses. In any case, the information strategy must align with business goals.

IG differs from IT governance, which involves technical management to support, implement, adopt, increase, and optimize software and hardware systems. IG must foster the growth of information as an asset to support the organization's information strategy. Most organizations seek a return on investment or some form of business case realization. To be successful, HIPs must balance crafting the long-term information asset framework and delivering value through short-term business case achievement or tangible investment returns.

Developing an IG business case or delivering returns requires a paradigm shift from focusing on information processing to developing and protecting information assets. Fulfilling the demands of an organization's information strategy can be realized by conforming outcomes to relatable business success measurements and performance metrics. For example:

- Quantifiable information veracity could be achieved by performing electronic health record (EHR) system compliance audits against company standards. Create points of evaluation and checklists to review audit trails.
- Run analysis on transactional processing to determine peaks of interface traffic and validity of medical device outputs to understand performance and timing. Track and trend findings.
- Institute user surveys regarding the design of the EHR to establish a baseline for level of information trust. Form focus groups to determine more specific pain points. Implement changes and resurvey users.
- Perform quality review assessments of information system conformance with security, usage, and downtime policies. Use a scoring system to report outcomes.
- Develop education and training for information stewardship. Conduct periodic tests and evaluations of the workforce and report scores.
- Introduce and implement a maturity model. The Information Governance Adoption Model (IGAM™), developed by AHIMA and measured via AHIMA's IG*HealthRate*™ platform, is an excellent example that allows the organization to determine what level of maturity is appropriate and quantify its progress toward that goal.

EIM exists in every organization—and so does IG. HIPs that have a passion for the mechanics, science, management, and valuation of health information are at a pivotal point in the industry to institutionalize IG within their organizations. IG will continue to mature, be further defined, and become a common model such as EIM. The blueprints are now becoming framework; and those involved today are creating tomorrow's structure. Explore the organizational landscape to determine what can be done to pave the road, repair the highway, or at least mark the path.

Notes

1. Laney, Douglas B. *Infonomics: How to Monetize, Manage, and Measure Information as an Asset for Competitive Advantage*. New York City, NY: Bibliomotion, 2017.
2. AHIMA. "Information Governance Principles for Healthcare (IGPHC)™." www.ahima.org/topics/infogovernance/igbasics.
3. Gartner, Inc. "Enterprise Information Management." www.gartner.com/it-glossary/enterprise-information-management-eim.

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